

REMARKS

Claims 1, 6-8, 23 and 42 are amended. Claims 25 and 43-44 are canceled. New claims 45-46 are added. Claims 10-12, 16, 18-19, 21-23 and 26-27 are withdrawn from consideration. Claims 1-3, 5-24, 26-27, 42 and 45-46 are pending in the application. Claims 1-3, 5-9, 13-15, 17, 20, 24, 42 and 45-46 are currently under consideration.

Claims 8 and 42-44 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. With respect to claim 8 the Examiner indicates that the added limitation of “wherein the two or more elements of the solid solution are other than a binary solution of Ta and Mo” is not sufficiently supported in the application as filed. Without admission as to the propriety of the Examiner’s rejection, claim 1 is amended to recite specific listing of first elements and second elements comprised by a solid solution of two or more elements. The recited list of elements include various elements from groups 1, 5, 6, 8, 9 and 10 of the periodic table and is therefore fully supported by the specification and claims as originally filed (see, for example, original claim 1). Accordingly, applicant respectfully requests withdrawal of the § 112 rejection of claim 8 in the Examiner’s next action.

With respect to claim 42, the Examiner indicates that the recited “wherein the component has not single element present at an amount exceeding 95%” is not sufficiently supported by the specification as filed. Without admission as to the propriety of the Examiner’s rejection, claim 42 is amended to recite “wherein the first element is present in an amount of from 0.001 atomic% to about 50 atomic%. Such is specifically supported by the specification at, for example, paragraph 64.

With respect to claims 43 and 44 the Examiner indicates that the Ta content recited in the claims is not sufficiently supported by the specification as filed. Without admission as to the propriety of the Examiner's rejection, claims 43 and 44 are cancelled.

Claims 1-3, 5-9, 13-15, 17, 20, 24 and 25 stand rejected under 35 U.S.C. § 102 as being anticipated by one or more of Schussler (U.S. Patent No. 3,592,639); Perry (U.S. Patent Publication No. 2004/0025986); and Kumar (U.S. Patent No. 6,521,173), considered individually. In accordance with MPEP § 2131, anticipation requires each and every element of a claim to be disclosed in a single prior art reference. Claims 1-3, 5-9, 13-15, 17, 20 and 24 are allowable over Schussler, Perry and Kumar for at least the reason that the references fail to disclose each and every element in any of those claims.

As amended, independent claim 1 recites a sputtering target surface where at least 99 atomic% of the surface consists of a single phase corresponding to a solid solution of two or more elements, the first of the elements being selected from H, Li, Na, K, Rb, Cs, Fr, V, Nb, Ta, Db, Cr, Mo, W, Sg, Fe, Ru, Os, Hs, Co, Rh, Ir, Mt, Ni, Pd, Pt, and Ds; and a second element being selected from H, Li, Na, K, Rb, Cs, Fr, V, Db, Cr, Sg, Fe, Hs, Co, Mt, and Ds, where each of the first and second elements are present in the solid solution at a concentration of at least 0.001%. The amendment to claim 1 is supported by the specification at paragraph 64 and the claims as originally filed. Not one of Schussler, Perry and Kumar discloses the claim 1 recited sputtering surface having a single phase corresponding to a solid solution of two or more elements including a first and second element selected from the respectively recited lists. Accordingly, claim 1 is not anticipated by Schussler, Perry or Kumar and is allowable over these references.

Dependent claims 6-8 and claim 23 (currently withdrawn) are amended to properly depend from independent claim 1. Dependent claim 25 is cancelled. Claims 2-3, 5-9, 13-15, 17, 20, 24 and 42 are allowable over Schussler, Perry and Kumar for at least the reason that they depend from allowable base claim 1.

Claims 43 and 44 stand rejected under 35 U.S.C. § 103(a) as being obvious over Dohjo (U.S. Patent No. 5,170,244). Without admission as to the propriety of the Examiner's rejections, claims 43 and 44 are canceled.

Claims 45 and 46 do not add "new matter" to the application since each is fully supported by the specification as originally filed. Claims 45 and 46 are supported by the specification at, for example, original claim 1 and the specification at paragraphs 32-38.

For the reasons discussed above, claims 1-3, 5-9, 13-15, 17, 20, 24 and 42 are allowable, and claims 45-46 are believed allowable. Accordingly, applicant respectfully requests formal allowance of claims 1-3, 5-9, 13-15, 17, 20, 24, 42 and 45-46 in the Examiner's next action.

Respectfully submitted,

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